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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,414	07/18/2003	Jake O. Deem	ASX-062	5006

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EXAMINER

CHOE, HENRY

ART UNIT

PAPER NUMBER

2817

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/623,414	Applicant(s) DEEM ET AL.	
	Examiner Henry K. Choe	Art Unit 2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) * is/are withdrawn from consideration.
- 5) ☐ Claim(s) is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-10, 14-18, 29, 31-34 and 36 is/are rejected.
- 7) ☒ Claim(s) 5, 6, 11-13, 19-28, 30 and 35 is/are objected to.
- 8) ☐ Claim(s) are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. .
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. <u> </u> |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/18/03</u> | 6) <input type="checkbox"/> Other: <u> </u> |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 7-10, 14-18, 29, 31-34 and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Cavers (Fig. 1).

Regarding claims 1, 7-10, 14-16, 18, 31-33 and 36, Cavers (Fig. 1) discloses an amplifier circuit comprising a first control module (CT1) which receives a first signal (105) representative of an input signal (51) and generates a second signal (110) capable of being used to modify a first characteristic (amplitude of input signal) of the input signal (51) using an open loop control routine (51, 30, DL1, 35, S3, 105, CT1, 110) and sending a third signal (115) capable of being used to pass control to a second control module [(CT2) the signal 115 can be read as the third signal since the signal 85 is affected by the signal 115], the second control module (CT2) which generates a fourth signal (120) capable of being used to modify the first characteristic (amplitude of the input signal) of the input signal (51) using a closed loop control routine (85, CT2, 120, 55, A2, 60, C2, 75, S6), and the first (CT1) and second (CT2) control modules include a look-up table.

Regarding claim 2, the at least one characteristic (GA) of the input signal (51) includes an amplitude of the input signal (51).

Regarding claim 3, the at least one characteristic (GB) of the input signal (51) includes a phase of the input signal (51).

Regarding claim 17, the limitation recited in the claim 17 is intended use of the invention.

Regarding claim 29, the second control module (CT2) is capable of generating the fourth signal (125) to account for a non-linearity.

Regarding claim 34, Cavers (Fig. 1) further including the method step of transitioning (DL1) after using the open loop control system (51, 30, DL1, 35, S3, 105, CT1, 110).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cavers (Fig. 1).

Cavers (Fig. 1) discloses all the limitations in the claim 4 except for that the method step of using the open loop control system when an input power of the input signal is above a threshold level. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have implemented the specific voltage level of the input signal, since they are based on the routine experimentation to obtain the optimum operating parameters.

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Allowable Subject Matter


Claims 5, 6, 11-13, 19-28, 30 and 35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Patent numbers (6,172,560; 6,734,732; 6,680,649) are the feedforward amplifiers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry Choe whose telephone number is (571) 272-1760.


HENRY CHOE
PRIMARY EXAMINER

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